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PRINCIPAL INVESTIGATOR: Jeffrey D. Laskin, Ph.D.

CONTRACTING ORGANIZATION: University of Medicine and Dentistry of New Jersey
Piscataway, New Jersey08854

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University of Medicine and Dentis			REPORT N			
Piscataway, New Jersey08854	,					
E-MAIL:						
JLASKIN@EOHSI.RUTGERS.E	DU					
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FOREWORD

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N/A For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

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N/A In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.

 $\underline{\text{N/A}}$ In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.

Jeffrey D. Laksin, Ph.D.

Advances in the Biology and Treatment of the Skin

Rutgers University Busch Campus, Piscataway, NJ (June 23 – 25, 1999)

SESSIONS I & 2: SKIN SCIENCE ~ NEW TECHNOLOGIES, NEW INSIGHTS

Richard Kalish, M.D.

Alain Rook, M.D.

Coffee Break

2:20 p.m.

 $2:45 \sim 3:10 \text{ p.m.}$

Wednesday, June 23	3			
8:20 ~ 8:30 am	Welcome Remarks & In	ntroduction	Jeffrey D. Laskin, Ph.D.	
	SESSIONS 1 & 2:	Skin Science	New Technologies, New Insights	y 30 300 40
	SESSION I: Moderator:	Diane E. Heck,	Ph.D.	
8:30 a.m.	Transgenic Models fo	or Studying Grow	th Factor Signaling in Mouse Skin	
	John DiGiovanni, Ph.	D.		
8:55 a.m.	Gene Microchip Anal	ysis of Dermal N	Iicrovascular Endothelial Cells	
	Diane E. Heck, Ph.D.			
9:05 a.m.	Subtraction Libraries	& Microarrays to	Study Keratinocyte Gene Expression	
	John J. Schlager, Ph.I	Э.		
9:30 a.m.	Strategies of Epithelia & Transit Amp		ntial Modulation of Stem Cells	
	Robert Lavker, Ph.D.			
9:55 ~ 10:25 a.m.	Coffee Break			
	SESSION II Moderator:	Christopher J. N	folloy, Ph.D.	. 50 ×C 45
10:25 a.m.	Keratinocyte Cell Cyc	le Regulation in	a Mouse Tumor Model	
	David K. Bol, Ph.D.			
10:50 a.m.	Epidermal Keratinocy Peroxisome Pro		atural & Synthetic	
	Brian Aneskievich, Ph	n.D.		
11:15 a.m.	Disorders in Keratins:	A Molecular Ba	sis for Skin Disease	
	Dennis Roop, Ph.D.			
12:05 ~ 1:30 p.m.	Lunch & Poster Session	on		
SESSIONS 3 & 4: THI	E BIOLOGY OF SKIN DISEASE	2		
	SESSION III Moder	ator: Alice B. G	ottlieb, M.D., Ph.D.	
1:30 p.m.	An Albertian-Biologic	al View of Irrita	nt Dermatitis	- مدن د
	Howard I. Maibach, M	1.D.	•	, 50 AT -0
1:55 p.m.	Antigen Processing &	T-cell Function	n Allergic Contact Dermatitis	

Pathogenesis & Treatment of Cutaneous T-cell Lymphoma

SESSION IV Moderator: Howard I. Maibach, M.D.

3:10 p.m. The Immunopathology of Leprosy: The Original Th1 & Thy2 Paradigm

William Levis, M.D.

3:35 p.m. Psoriasis: The Model for Th1-type Immune Disorders

Alice B. Gottlieb, M.D., Ph.D.

4:00 p.m. Pemphigus: Skin Failure Due to Loss of Cell Adhesion

John R. Stanley, M.D.

4:25 p.m. A Fully Human Anti-IL-8 Antibody in the Treatment of Psoriasis

Gerald Krueger, M.D.

 $4:35 \sim 6:00$ p.m. Posters & Reception

Thursday, June 24

SESSIONS 5 & 6: CANCER ~ PHOTOBIOLOGY

SESSION V Moderator: Allan H. Conney, Ph.D.

8:30 a.m. Photocarcinogenesis in Ornithine Decarboxylase Transgenic Mice

Hasan Mukhtar, Ph.D.

8:55 a.m. Aberrant Cell Cycle Regulation in Melanoma

Ruth Halaban, Ph.D.

9:20 a.m. The Role of Protein Kinase C in the Development of Malignant Melanoma

Susan Rotenberg, Ph.D.

9:55 a.m. Ornithine Decarboxylase, Keratinocyte Growth Regulation & Skin Cancer

Susan Gilmour, Ph.D.

10:20 ~ 10:40 a.m. Coffee Break

SESSION VI Moderator: Jeffrey D. Laskin, Ph.D.

10:40 a.m. State of the Art of Photoprotection

Prof. Dr. rer. Nat. Hans Schaefer

11:05 a.m. Toxicity of Chronically Applied Chemicals & Some Similarities to Photodamage

Lorraine H. Kligman, Ph.D.

11:25 a.m. Psoralen Photobiology, Psoriasis, PUVA & Skin Cancer, Genotoxic or Immunotoxic?

Suggestions from Molecular Epidemiology

Frank Gasparro, Ph.D.

11:50 a.m. UV-Induced MMP-1 Production ~ An In vitro Model for Assessing Photoprotection

10 mm

Stan Shapiro, Ph.D.

 $12:15 \sim 1:30$ p.m. Lunch & Posters

Sessions 7 & 8: Redox Regulation, Oxidative Stress & Antioxidants $\,$ in the Skin \sim

PHOTOAGING & PHOTODAMAGE

SESSION VII Moderator: Edward J. Yurkow, Ph.D.

1:30 p.m. Redox Status of the Skin

Edward Yurkow, Ph.D.

1:45 p.m.	Nitric Oxide and Skin Inflammation
	Jeffrey D. Laskin, Ph.D.
1:55 p.m.	Site-specific Oxidative Stress in Keratinocyte Phospholipids:
	A Signaling Pathway in Apoptosis
	Valerian E. Kagan, Ph.D.
2:20 p.m.	Coenzyme Q10, A Cutaneous Antioxidant & Energizer
	Udo Hoppe, M.D.
2:45 p.m.	High Strength Tretinoin Treatment of Photoaged Skin
	Douglas Kligman, M.D., Ph.D.
3:10 ~ 3:30 p.m.	Coffee Break
	SESSION VIII Moderator: Diane E. Heck, Ph.D.
3:30 p.m.	Drugs, Cosmetics & the Skin ~ An Appraisal of Albert Kligman's Ideas
	Myra Barker, Ph.D.
3:55 p.m.	Identifying Natural Products with Anti-Inflammatory Activity
	Katharine Martin, Ph.D.
4:05 p.m.	Anti-oxidant Inhibition of Photodamage: A Clinical Evaluation
	Daniel Maes, Ph.D.
4:15 p.m.	Genistein, A Novel Chemical for the Prevention of Skin Cancers & Photodamage
	Mark Lebwohl, M.D.
4:40 p.m.	Mechanisms of Photoaging & Prevention by Retinoids
	John Voorhees, M.D.
5:30 ~ 6:30 p.m.	Reception & Poster Session
7:00 ~ 9:30 p.m.	Banquet Dinner in honor of Dr. Albert Kligman
Friday, June 25	

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Sessions 9 & 10: Hair, Models & Mechanisms ~ Basement Membrane - Cutaneous Pharmacology

	SESSION IX Moderators: T-T Sun, Ph.D. and Donald Gerecke, Ph.D.
8:30 a.m.	Role of the Sulfotransferase Gene Family in Hair Growth Regulation
	& Skin Differentiation
	Thomas P. Dooley, Ph.D.
8:55 a.m.	The Dermal-Epidermal Junction
	Robert Burgeson, Ph.D.
9:20 a.m.	Molecular Aspects of Inherited Alopecias
	Angela M. Christiano, Ph.D.
9:45 ~ 10:15 a.m.	Coffee Break
10:15 a.m.	Molecular Genetics of Cutaneous Basement Membrane Zone
	Jouni Uitto, M.D., Ph.D.
	SESSION X Moderator: Joel Zatz, Ph.D.
10:40 a.m.	Advances in the Science of Percutaneous Absorption
	Thomas Franz, M.D.
11:05 a.m.	Perspectives on Hydroxyacids

11:30 a.m.

An overview of the mechanism of action of retinoid related molecules

Braham Shroot, Ph.D.

11:55 ~ 1:30

Lunch and Poster Session

Howard I. Maibach, M.D.

SESSIONS 10 & 11: COSMETICS ~ PHARMACEUTICS: THE FADING BARRIER

	SESSION XI Moderator: Jules Mitchell, Ph.D.		
1:30 p.m.	Evaluating the Role of Antibiotics in Skin Therapy	•	* Residen
	Otto Mills, Ph.D.		
1:55 p.m.	Clinical Drug Evaluation		
	Jules T. Mitchel, Ph.D.		
2:20 p.m.	Regulatory Considerations for Retin-A Creams		
	Kim Spear, M.D.		
2:30 p.m.	Efficacy of Cosmetic Retinol Formulations in Aging Skin		
	Sergio Nacht, Ph.D.		
2:55 ~ 3:20 p.m.	Coffee Break		
3:20 p.m.	Advances in Photodiagnostics		
	Prof Dr. Med Percy Lehmann		
3:45 p.m.	"Keynote Address"		
	Sensitive Skin ~ The Interface Between Dermatology & Cosmetology		
	Albert Kligman, M.D., Ph.D.	•	* Parker
4:15 p.m.	Closing Comments		

FACULTY LIST

Brian Aneskievich, Ph.D.	U. of Connecticut
Myra Barker, Ph.D	Mary Kay Cosmetics
David K. Bol, Ph.D.	Bristol-Myers Squibb
Robert Burgeson, Ph.D.	
Angela M. Christiano, Ph.D	
Allan Conney, Ph.D.	
John DiGiovanni, Ph.D.	
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Lorraine H. Kligman, Ph.D.	
Gerald Krueger, M.D.	
Robert Lavker, Ph.D.	
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Jeffrey D. Laskin, Ph.D. Mark Lebwohl, M.D.	
Percy Lehmann, M.D.	
William Levis, M.D.	
Daniel Maes, Ph.D. Howard I. Maibach, M.D.	
Katharine Martin	
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Kim Spear, M.D.	·
John R. Stanley, M.D	
T.T. Sun, Ph.D.	
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